



ISO Registered Company



## Model 6B00

### Inline Deflagration Flame Arrestor

#### **OBJECTIVE**

The Model 6B00 inline deflagration flame arrestor is a device that can be fitted to the opening of an enclosure or to the connecting pipe work of a system of enclosures. Its primary function is to allow the flow of gases or vapor of flammable liquids through the enclosure, but prevent the transmission of a flame. The element inside the housing provides an extinguishing barrier to the ignited vapor mixture by absorbing heat from the flame. The Model 6B00 is used as an independent safety system to ensure explosion protection.

#### **TECHNIQUE**

6B00 flame arrestors are designed on the principle of "quenching gap". The crimped SST metal element allows vapor to pass through in order to allow a vessel to breathe, yet prevents the propagation of a flame from the exposed side to the protected side.

#### **CONSTRUCTION**

**Housing Material:** Carbon Steel, Stainless Steel.

**Trim Material:** Stainless Steel (1.4571) element. Standard element is suitable for explosion group IIA1 and IIA flammable gases and vapors. Elements for other gas groups are available upon request.

#### **SPECIAL FEATURES**

The Model 6B00 is designed, manufactured, and tested according to Directive 2014/34/EU (ATEX114) and ISO 16852.

The single element design is bidirectional and available for horizontal or vertical installations.

The maximum distance between flame arrestor and ignition source should not be more than 50 x the diameter of the connection size for most hydrocarbon gases.

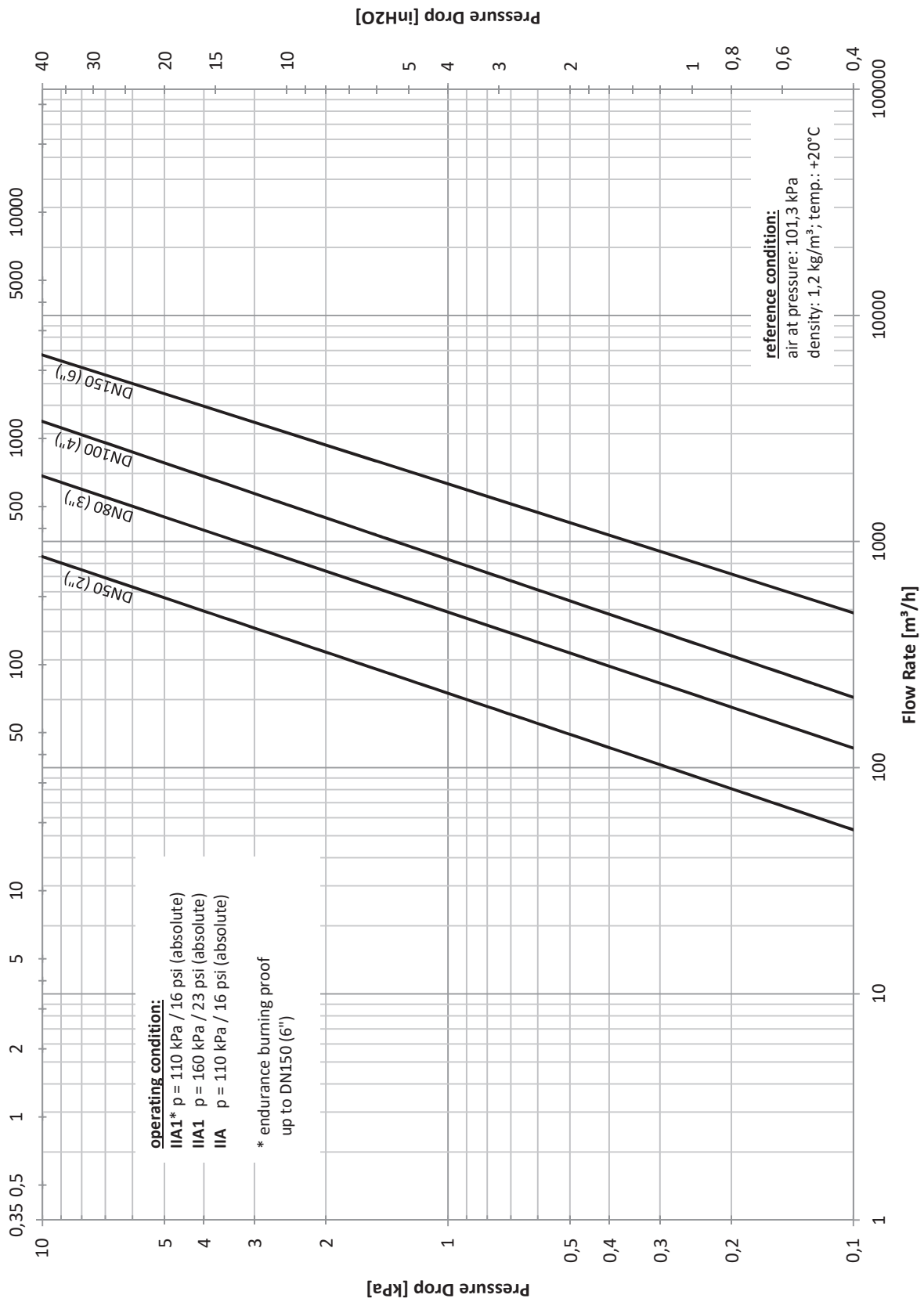
**Easy Maintenance:** The Model 6B00 deflagration flame arrestor is a passive device with no moving parts. The flame cell element can be easily removed for inspection and cleaning in appropriate solvent solution.

**Sizes:** Units are available in DN40, 50, 65, 80, 100, 125, 150, 200 (1-1/2", 2", 3", 4", 5", 6", 8") line sizes. Standard for flange connections to EN1092-1 PN10 or ASME B16.5 150#RF.

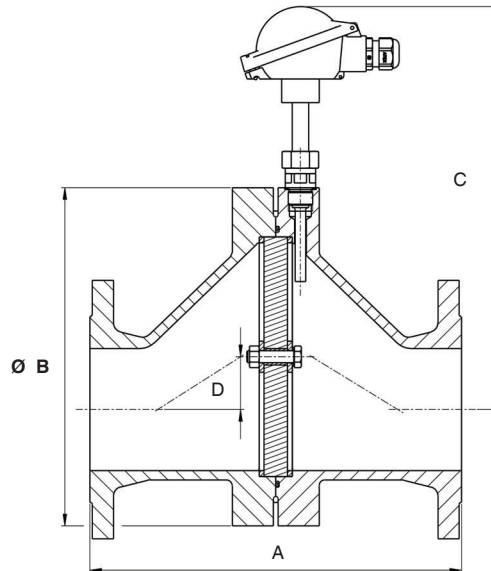
# Series 6B00 Flow Curves

IIA1/IIA and 60°C (140°F)

Flow Rate [Hundreds of CFH]



## DIMENSIONS



Metric Units - mm					
SIZE	A		Ø B	C	D
	IIA1	IIA			
DIN, ASME (*)					
DN40	310		181	273	31
DN50	287		181	268	26
DN65 (**)	314		215	297	35
DN80	319		240	312	37
DN100	317		288	345	45
DN125	366		370	397	57
DN150	374		445	458	78
DN200	374		545	520	90
(*) DIN (PN10) Flange, JIS 10K Flange, ASME 150RF Flange					
(**) NOT available with ASME 150RF Flange					

English Units - in					
SIZE	A		Ø B	C	D
	IIA1	IIA			
DIN, ASME (*)					
1-1/2"	12.2		7.1	10.7	1.2
2"	11.3		7.1	10.6	1.0
2-1/2"(**)	12.4		8.5	11.7	1.4
3"	12.6		9.4	12.3	1.5
4"	12.5		11.4	13.6	1.8
5" (**)	14.4		14.6	15.6	2.2
6"	14.7		17.5	18.0	3.1
8"	14.7		21.5	20.5	3.5
(*) DIN (PN10) Flange, JIS 10K Flange, ASME 150RF Flange					
(**) NOT available with ASME 150RF Flange					

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# 6B00 Series PRODUCT CODER

06/07/19



POSITION 3 & 4 SIZE / EXPLOSION GROUP		
Size metric (in)	IIA1	IIA
	CODE	
DN40 (1-1/2")	0U	4E
DN50 (2")	0V	4F
DN65 (2-1/2")	13	4P
DN80 (3")	1B	4Y
DN100 (4")	1K	56
DN125 (5")	VW	VX
DN150 (6")	1U	5E
DN200 (8")	22	5N

POSITION 5 OPERATING CONDITION				
Explosion Group	Size	p <sub>max</sub> absolute in kPa (psi)	T <sub>max</sub> in °C (°F)	CODE
IIA1	All Sizes	110 (16)	≤ 60 (140)	1 *
	All Sizes	160 (23)	≤ 60 (140)	6
IIA	All Sizes	110 (16)	≤ 60 (140)	1

\* Endurance burning proof available up to DN150 (6") size.  
Consult factory for additional operating conditions.

POSITION 7 & 8 CASING / ELEMENT / RIM MATERIALS	
Material	CODE
Stainless Steel (1.4571)	02

POSITION 9 GASKET MATERIALS	
Material	CODE
NBR	1
FKM	2
EPDM	3
FKM/FEP seamless covered	4

POSITION 10 & 11 HOUSING MATERIALS / CONNECTION		
(Flanges) Sizes DN40-200 (1-1/2 - 8")	DIN (PN10)	ASME (150#RF) *
	CODE	
Carbon Steel (1.0619)	37	39
Stainless Steel (1.4581)	97	99

(\*) Not Available in sizes 2-1/2" and 5".

POSITION 12 PORTS	
Number / Location	CODE
One port G1/2" on each side	2
One port G1/2" on one side (Standard)	3

POSITION 13 MOUNTING KIT MAT'L FOR HOUSING	
Material	CODE
8.8 Zinc Plated (Standard CS)	1
A2 Stainless Steel (Standard SST)	2
A4 Stainless Steel	3

POSITION 14 & 15 TEMPERATURE SENSOR (PT100)		
Quantity	Ex ia 3-wire	Ex ia 3-wire plus transmitter
	CODE	
None	00	00
One	01	02

POSITION 16 NAME PLATE	
Material / Language	CODE
Alum / German	7
Alum / English	8

POSITION 18 PAINT	
Color	CODE
No Paint (Only Stainless Steel)	0
Epoxy (Standard) Signal Blue (RAL5005)	1
Hempadur (Off-Shore) Flame Red (RAL3000)	9

Cashco, Inc.  
P.O. Box 6  
Ellsworth, KS 67439-0006  
PH (785) 472-4461  
Fax. # (785) 472-3539  
www.cashco.com  
email: sales@cashco.com  
Printed in U.S.A. 6A00-TB

Cashco GmbH  
Handwerkerstrasse 15  
15366 Hoppegarten, Germany  
PH +49 3342 30968 0  
Fax. No. +49 3342 30968 29  
www.cashco.com  
email: germany@cashco.com

Cashco do Brasil, Ltda.  
Al.Venus, 340  
Indaiatuba - Sao Paulo, Brazil  
PH +55 11 99677 7177  
Fax. No.  
www.cashco.com  
email: brazil@cashco.com